

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/838,565	0	4/19/2001	l Wolfgang Tager		8747
25763 7590 08/27/2004				EXAMINER	
DORSEY &			KIM, KEVIN		
50 SOUTH S		PERTY DEPARTN REET	ART UNIT	PAPER NUMBER	
MINNEAPO	LIS, MN	55402-1498	2634		

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
-		09/838,565	TAGER ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Kevin Y Kim	2634				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address				
THE I - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)	Responsive to communication(s) filed on 19 A	<u>pril 2001</u> .					
2a) <u></u> ☐	This action is FINAL . 2b) This action is non-final.						
3)⊠	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
5)⊠ 6)□	Claim(s) <u>1-9</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) <u>1-9</u> is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or						
Applicat	ion Papers		1 · · ·				
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>19 April 2001</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	D accepted or b)⊠ objected to drawing(s) be held in abeyance. Settion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority :	under 35 U.S.C. § 119						
12)[a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea See the attached detailed Office action for a list	ts have been received. ts have been received in Applicat ority documents have been receive ou (PCT Rule 17.2(a)).	ion No ed in this National Stage				
2) Notice 3) Infor	nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

Application/Control Number: 09/838,565

Art Unit: 2634

DETAILED ACTION

Drawings

1. Figure 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). In addition, block 12 in Fig. 1, described as a modem, is not properly labeled as such. Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this application, the Abstract contains more than 150 words.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without

Application/Control Number: 09/838,565

Art Unit: 2634

underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

In this application, proper headings are missing.

Allowable Subject Matter

- 3. Claims 1-9 are allowed.
- 4. The following is a statement of reasons for the indication of allowable subject matter: no prior art has been to disclose or suggest setting the partial power and partial rate of each successive subchannel of a muliticarrier by quantizing a calculated partial rate of the present channel, based on the S/N ratio, adapting the partial power according to the quantized rate and

Art Unit: 2634

adapting the partial power and rate of another channel based on the adapted partial power of the present channel.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kapoor et al (US 6,516,027) discloses quantizing subchannel bit allocation, i.e., data rate and determining corresponding gain scaling to maintain the same bit error rate.

6. This application is in condition for allowance except for the formal matters as set forth above:

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y Kim whose telephone number is 703-305-4082. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/838,565

Art Unit: 2634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kvk

CHIEH M. FAN PRIMARY EXAMINER